

Comparing Student and Satellite Cloud Observations

- What We Compare
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What We Compare

- Cloud Amount
 - Clear
 - Partly Cloudy
 - Mostly Cloudy
 - Overcast
- Cloud Height
 - Low
 - Mid
 - High
- Number of Cloud Layers
- Cloud Visual Opacity

How to Match Observations

- Satellite and Student Observations Are Entered Into the S'COOL Database
- S'COOL Site Must Be Within Satellite Area
- Satellite and Student Observation Times Must Be Within 15 Minutes

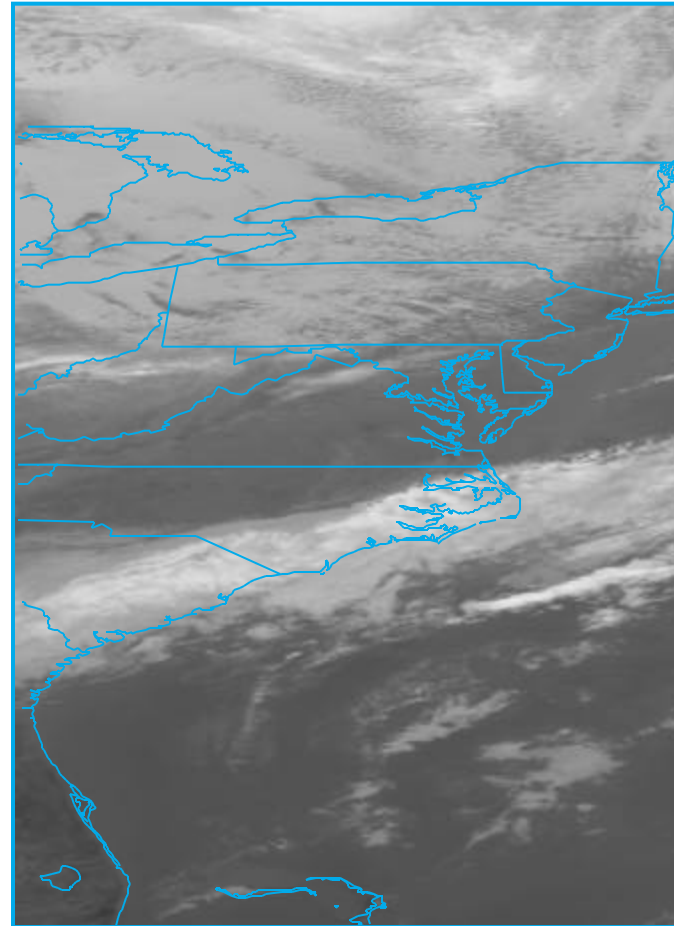
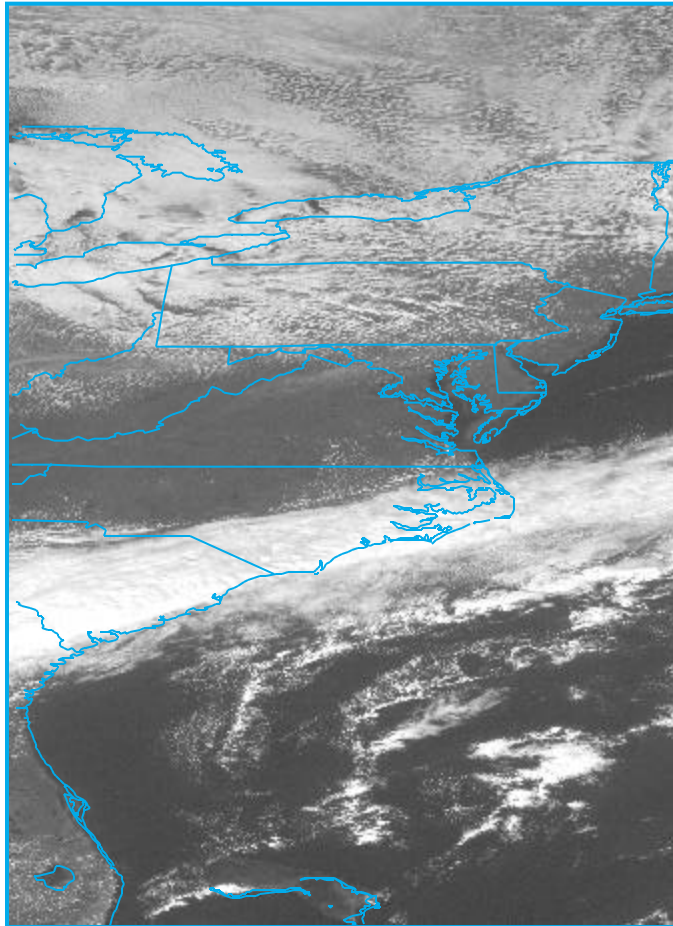
FIRST S'COOL Comparison

Cloud Observations Over Gloucester, VA
January 13 & 17, 1997

	Gloucester Student Observations	CERES Cloud Measurements	Do They Agree?
Cloud Type	None	None	Yes
Cloud Fraction	0% (Clear)	0%	Yes
Cloud Height	No Cloud	No Cloud	Yes
Visual Opacity	No Cloud	No Cloud (optical depth = 0.0)	Yes

Cloudy Day Comparison

October 22, 1997 17:45 GMT

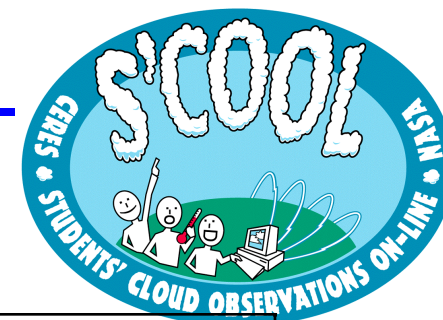


Comparison Results

October 22, 1997 17:45 GMT

	Poquoson Student Observations	Newport News Student Observations	CERES Cloud Measurements	Do They Agree?
Cloud Type	Cumulus	Alto cumulus + Cirrus	Low water clouds	Poq: Yes NN: No
Cloud Fraction	0 - 5% (Clear)	5 - 50% (Partly Cloudy)	7%	Close
Cloud Height	Low	Mid / High	Low	Poq: Yes NN: No
Visual Opacity	Translucent	Transparent	Translucent (optical depth = 6.6)	Poq: Yes NN: No

Comment: Poquoson observed contrails - These may be what the Newport News students were reporting. There also was a mid-level layer cloud to the south.



Updated Cloud Amount Comparison (Observations within 15 minutes)

		S'COOL Students			
		Clear	Partly Cloudy	Mostly Cloudy	Overcast
Satellite	Clear	27	2	2	0
	Partly Cloudy	7	10	2	1
	Mostly Cloudy	5	3	12	7
	Overcast	0	1	8	12

